	Wheat irrigated lands						
Group A	Total surface (jbs)	Cultivated surface in 2002 (jbs)	2002 yield (grain/seed)	Seed rate (sere/jb)	Expected 2002 production (seer)	Seed production in 2001 (MT)	Seed bought for 2002 (MT)
Shadian	86	43	8	4	1376	172	0
Safid Chichma	860	860	6	4	20640	3440	0
TOTAL DISTRICT	**946**	**903**	**6,1**	**4**	**22016**	**3612**	**0**

Source : SOLIDARITES Charkent district

The production of wheat per family in irrigated lands can be estimated as follows:
22016 seer / 1075 families = 20,5 seer/ family
Assuming an average price of 2$ per seer, the average income per family in irrigated lands can be estimated at 41$.

- Potato production:

	Potato crop			
Group A	Total surface (jbs)	Cultivated surface in 2002 (jbs)	2002 yield (seer/jbs)	Expected 2002 production (seer)
Shadian	86	43	12	516
Safid Chichma	2150	2150	8	17200
TOTAL DISTRICT	**2236**	**2193**	**8**	**17716**

Source : SOLIDARITES Charkent district

A family owning potatoes crop lands gets an average production of 16,5 seer of potatoes per year, equivalent to **38 $** (assuming 1 seer of potatoes = 2,3 $).

In irrigated fields, each family owns an average of 0,9 jerrib. However, the repartition of land among the population is marked by big discrepancies:

- landless: 35%
- small landowners (less than one jerrib): 60%
- large landowners (more than one jerrib): 5%

Orchards

	Orchards		
Group A	Total surface (jbs)	2002 yield (seer/jbs)	Expected 2002 production (seer)
Shadian	215	330	70950
Safid Chichma	26	400	10400
TOTAL DISTRICT	**241**	**338**	**81350**

Source: Solidarites data

Orchards are developed in this district in irrigated lands because climate is favourable. With an average of 0,22 jerrib per family in orchards zone, the fruit production is 75 seer per family per year, equivalent to 378 $ (assuming 5$ per seer of fruits). However, this production belongs to only 25 % of the area population.

Livestock

Zone	Animals headcount					
	Sheep	Goats	Cows	Oxen	Donkeys	Camels
Shadian	1075	215	65	86	430	0
Safid Chichma	430	860	172	129	860	0
Sub-total group A	**1505**	**1075**	**237**	**215**	**1290**	**0**
Tarolai	6271	6271	0	44	502	0
Sub-total group B	**6271**	**6271**	**0**	**44**	**502**	**0**
Oy Bulak	986	1117	37	197	744	0
Yailak	1433	478	0	14	478	0
Miranji	1190	893	0	238	1190	0
Sub-total group C	**3609**	**2488**	**37**	**449**	**2412**	**0**
TOTAL DISTRICT	**11385**	**9834**	**274**	**708**	**4204**	**0**

Source : SOLIDARITES

Cows and oxen are mainly present in irrigated fields (ratio of one animal for two families) because they are intensively used to plough, and because the population in rainfed zones population cannot afford them.

Donkeys are vital for the population, especially for those who live far from the main road. This is the reason why the number of donkeys decreased only by 60% from 2001 to 2002.

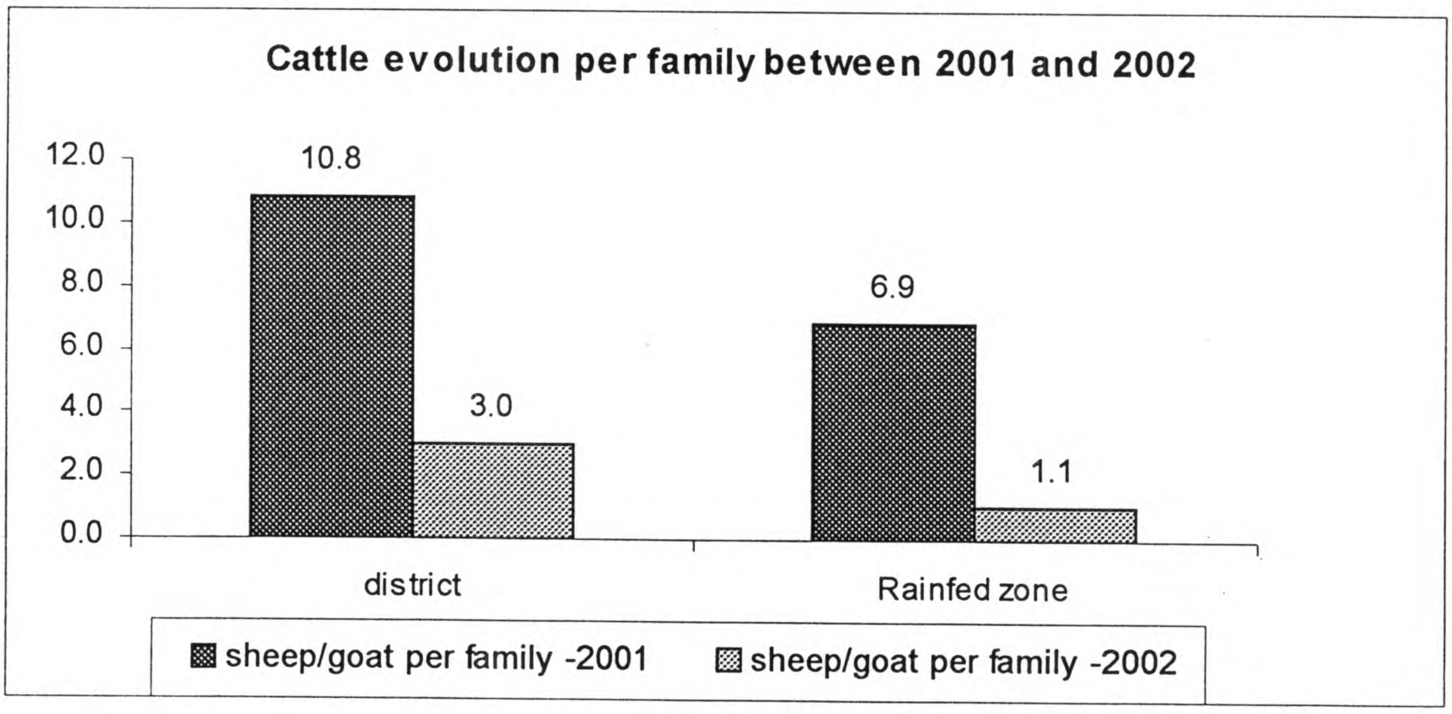
Based on the data provided in the table below, it is possible to calculate the livestock capital per family (excluding donkeys, since donkey meat is not traded) for each zone:

		Animal capital				
		Sheep	**Goats**	**Cows**	**Oxen**	**Total**
	Price/ animal ($)	100	40	333	500	
Group A	Total animals	1505	1075	237	215	
	Total price ($)	150500	43000	78921	107500	
	Value / family ($)	**140**	**40**	**73**	**100**	**353**
Group B	Total animals	6271	6271	0	44	
	Total price ($)	627100	250840	0	22000	
	Value / family ($)	**1428**	**571**	**0**	**50**	**2050**
Group C	Total animals	3609	2488	37	449	
	Total price ($)	360900	99520	12321	224500	
	Value / family ($)	**66**	**18**	**2**	**41**	**127**

Source: Solidarites data

This table shows that the value of livestock per family is much lower in rainfed zones (group C).

The chart below displays the evolution of livestock in rainfed zones vs. the overall district:



With a decrease of more than 85% between 2001 and 2002, the sheep and goat situation is appalling in rainfed zones.

This situation can be explained by three main reasons: 1) Because of the 3 years of drought, many animals died from hunger 2) Animals were sold because people could not generate enough revenues from their fields.

Drinking water and irrigation

The following table summarises the evolution of ground water in 2000 and 2002:

	Drinking water and irrigation	
	% decrease of springs	**Snow layer thickness (cm)**
2001	40%	18
2002	45%	60

Source: Solidarites data

In 2001 and 2002, the spring flow decreased steadily, with bad consequences on the accessibility of drinking water for the whole population and of water supply for landowners in irrigated lands.

The snow layer is three times as thick as it was last year; however, the water derived from snow is mainly used by downstream areas (not in Charkent).

Coping mechanism

3,900 people are casual workers in Afghanistan (mainly in Mazar-e-Sharrif). This number is high because the economy of the district is based on rainfed lands which have not produced in the last three years. Due to the easy access to Mazar-e-Sharif, it is common for workers to try to find an opportunity in town.

We can estimate that these people send an average of 50$ of remittances to their family each year.

5% of Charkent population declare having relatives abroad, but nobody admit receiving money from them. In fact, Charkent people do not accept to give information in relation to the money they receive from their family. However, it can be estimated that that these families receive an average of 150 $ per year.

It can also be estimated that at least 5% of Charkent families have alternative sources of income (shopkeeper, daily work, car drivers, etc.). The average alternative source of income can be estimated at around 600$ per year for the 5% concerned.

Overall, the alternative sources of income generate a significant amount per family, as calculated below:

(50$ x 3900 families + 5% x 7016 families x 150$ + 5% x 7016 families x 600$)/ 7016 families = **65** $ per year or **5,4** $ per month

At last, it should be mentioned that Solidarites distributed 1580 MT of wheat (between December and April) and is injecting 100000 $ of cash in the district, through cash for work projects. Thus an average of 79$ per family will have been distributed by the end of June 2002.

Additional information

Wheat stocks

Wheat in stock / family					
Average qty (kg)	% of families with 0 - 10 kg	% of families with 10 - 30 kg	% of families with 30 - 50 kg	% of families with 50 - 100 kg	% of families with > 100 kg
11	75%	16%	5%	3%	**1%**

Source: Solidarites data

Most of the survey was conducted two months after the first free distribution. As a consequence, some people succeeded to keep some wheat in stock. This amount of wheat was almost finished at the time of the survey, but another distribution was implemented in March.

Indebtedness

Zone	CASH		WHEAT			TOTAL
	Average debt ($)	**Indebted families**	**Average debt (seer)**	**Equivalent in $**	**Indebted families**	**Total debt ($)**
Shadian	83	258	50	100	194	40814
Safid Chichma	33	172	70	140	129	23736
Sub-total group A	**63**	**430**	**58**	**116**	**323**	**64550**
Tarolai	16	188	50	100	188	21808
Sub-total group B	**16**	**188**	**50**	**100**	**188**	**21808**
Oy Bulak	264	1991	55	110	1935	738474
Yailak	16	717	60	120	717	97512
Miranji	330	1428	20	40	1428	528360
Sub-total group C	**244**	**4136**	**43,5**	**87**	**4080**	**1364346**
TOTAL DISTRICT	**219**	**4754**	**45**	**90**	**4591**	**1450704**

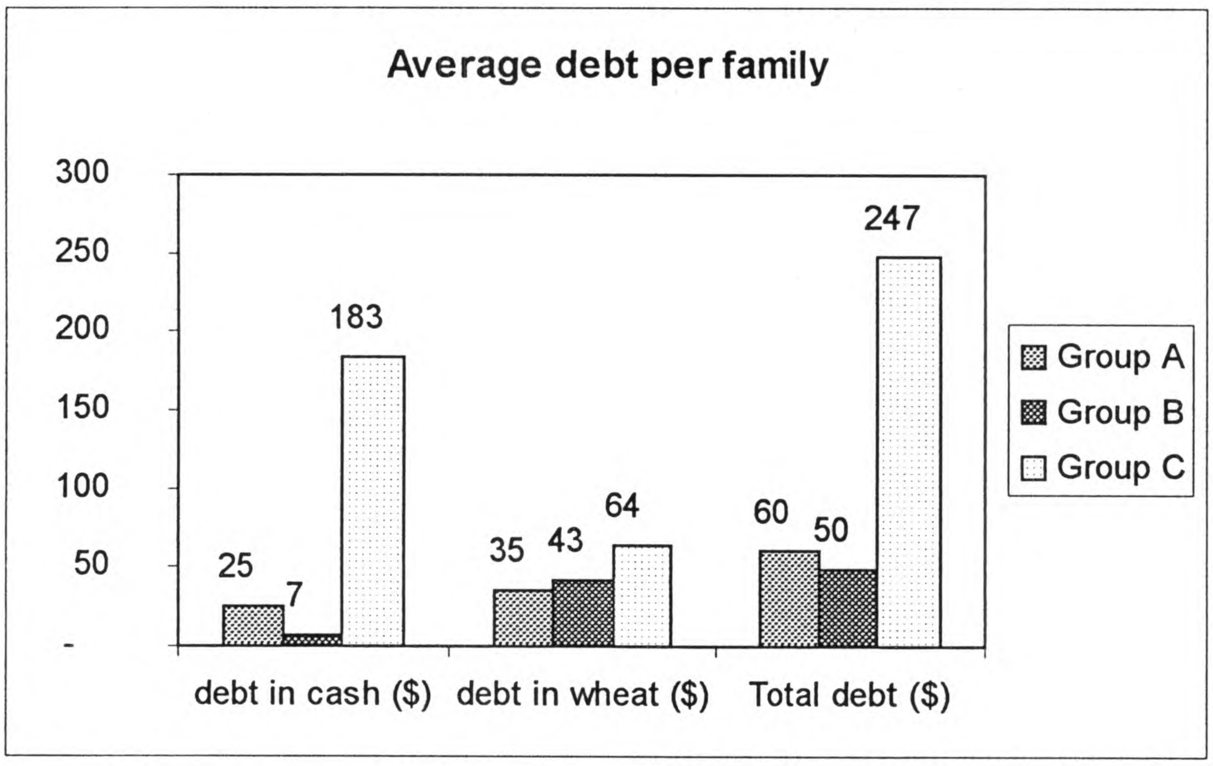
Source: Solidarites data

67 % of the population is indebted in Charkent district.

The average debt per indebted family is 219 $.

Adding up the debt in wheat contracted by families, the amount reaches 305 $ per indebted family (assuming that all cash borrowers have also borrowed wheat).

The chart below shows the amount of money ($) and wheat (equivalent in $) borrowed from the population, for each type of agricultural zone.



Source: Solidarites data

Groups C has a high debt in cash. This can be explained by the fact that rain fed farmers did not produce anything in the last 3 years. At the same time, they still had to buy basic products and materials to try to plant their fields. As a result, they had to borrow more and more money, which drove their cash debt up.

Complementary income

The main source of complementary income is bush selling in Mazar-e-Sharif. This activity only concerns population from groups A and B, due to their easy access to/from Mazar-e-Sharif.

Zone	Alternative income		
	Families involved	Average income per family involved ($)	Total income ($)
Shadian	323	200	64600
Safid Chichma	215	100	21500
Sub-total group A	**538**	**160**	**86100**
Tarolai	314	200	62800
Sub-total group B	**314**	**200**	**62800**
TOTAL DISTRICT	**852**	**175**	**148900**

Source: Solidarites data

The average income derived from this activity is 175$ per family involved per year. The income from bush selling is lower in Safid Chichma because this area is further from Mazar-e-Sharif, hence involving more transportation costs which do not make this activity profitable for everyone. It appears then that accessibility is key to the development of the district, which is confirmed by the wish number one expressed by the population: road construction.

Yailak zone, in spite of its distance from the city, has few alternative income: ice selling in summer, medical plant selling. The population did not acknowledge receiving significant amount of money from these activities, but it can explain why the debt of this area is less important than in other rainfed-only zones (116$/ family).

Meal composition

Food items for meals	Wheat %	Corn %	Rice %	Barley %	Potatoes %
Average	60	30	5	4	1

Wheat and corn constitute the main cereals used for the meals.

III. CONCLUSION

We have calculated indicators of population wealth (net worth) in the different groups identified, based on the following assumptions:

- Rainfed production as per the best case scenario, ie the drought does not carry on
- Livestock is considered to be the only source capital: this assumption is consistent with the discussions we had with local shuras, in which it appeared that those people who flee from their homes (as a consequence of the drought or of persecutions) tend not to sell off their properties before they leave. One reason to explain this behavior is that those people are expecting to come back to their homes at some point, and to take back their properties.
- Farmers's debt remains flat over the projected period of time
- No humanitarian assistance is provided after June

Group A

(Amounts in $)	March-May 2002	June-August 2002	Sept.-Nov. 2002	Dec 2002 - Feb 2003	Cumulative
Revenues					
Irrigated fields - Wheat	0	41	0	0	**41**
Irrigated fields - Potato	0	38	0	0	**38**
Irrigated fields - Orchards	0	378	0	0	**378**
Rainfed fields - Wheat	0	200	0	0	**200**
Bush selling	20	20	20	20	**80**
Remittances	16	16	16	16	**65**
Humanitarian aid (1)	44	14	0	0	**58**
Total revenues	**80**	**707**	**36**	**36**	**860**
Costs					
Food expenses (2)	98	98	98	98	**392**
Total costs	**98**	**98**	**98**	**98**	**392**
Net income	**-18**	**609**	**-62**	**-62**	**468**
Capital					
Initial capital	353	335	944	883	353
Change	-18	609	-62	-62	468
Final capital	**335**	**944**	**883**	**821**	**821**
Debt					
Debt in cash	25	25	25	25	25
Debt in wheat	35	25	25	25	25
Total debt	**60**	**50**	**50**	**50**	**50**
Net worth	**275**	**894**	**832**	**770**	**770**

(1) Based on Solidarites' programmes.
(2) 0.636 kg of wheat x 6 persons x 0.3 $ x 90 days.

The table below summarizes all the sources of income and of costs identified in our survey, on a per family basis, for Group A population. In addition, it provides some data in relation to average value of properties and debt contracted by an average family of the zone.

From an income perspective, the survey shows that population from Group A draw 53% of their annual revenues from their orchards and irrigated fields, and only 23% from their rainfed lands. Even assuming no production from their rainfed lands, this population would get a positive cumulative net income over the projected period, meaning that there is not a structural process of impoverishment.

In addition, from a capital perspective, population from group A benefit from a reasonable amount of livestock in conjunction with a relatively low amount of debt. Overall, it means that they are in a position where they can increase their networth over time, without any humanitarian assistance.

However, this conclusion should be mitigated by the fact that some big discrepancies remain within the population living in this area. It was not within the scope of this survey to provide detailed information regarding the allocation of wealth at the local level (within each zone, and within each community). Therefore, based on our assumptions, it seems that population from Group A is economically self-sufficient overall, which does not mean that some parts of the population do not suffer from severe depletion of resources.

Group B

(Amounts in $)	March-May 2002	June-August 2002	Sept.-Nov. 2002	Dec 2002 - Feb 2003	Cumulative
Revenues					
Rainfed fields - Wheat	0	428	0	0	**428**
Bush selling	36	36	36	36	**143**
Remittances	16	16	16	16	**65**
Humanitarian aid (1)	44	14	0	0	**58**
Total revenues	**96**	**494**	**52**	**52**	**694**
Costs					
Food expenses (2)	98	98	98	98	**392**
Total costs	**98**	**98**	**98**	**98**	**392**
Net income	**-2**	**396**	**-46**	**-46**	**302**
Capital					
Initial capital	2,050	2,048	2,444	2,398	2,050
Change	-2	396	-46	-46	302
Final capital	**2,048**	**2,444**	**2,398**	**2,352**	**2,352**
Debt					
Debt in cash	7	7	7	7	7
Debt in wheat	43	43	43	43	43
Total debt	**50**	**50**	**50**	**50**	**50**
Net worth	**1,998**	**2,394**	**2,348**	**2,302**	**2,302**

(1) Based on Solidarites' programmes.
(2) 0.636 kg of wheat x 6 persons x 0.3 $ x 90 days.

The table below summarizes all the sources of income and of costs identified in our survey, on a per family basis, for Group B population. In addition, it provides some data in relation to average value of properties and debt contracted by an average family of the zone.

From an income perspective, the survey shows that population from Group B draw 62% of their annual revenues from their rainfed lands, the rest being derived from bush selling (21%), remittances (9%) and humanitarian aid (8%). At the cumulative

FOOD SECURITY ASSESSMENT IN AFGHAN RURAL AREAS



CHARKENT DISTRICT – BALKH PROVINCE

NORTH AFGHANISTAN

March 2002

net income level, this population remains positive, but numbers suggest that this population is much more exposed to natural hazards than population from Group A. Should the drought carry on this season, the average farmer would significantly turn net income negative (-126$ on average per year).

However, the risk associated with the revenue of these farmers mix is widely mitigated by the vast livestock claimed by inhabitants of the zone. With an average value of livestock per family 6 times higher than Group A and 16 times higher than Group B, the population from Group C can rely on a relatively comfortable amount of capital, which prevent them from severe impoverishment. Assuming no production from rainfed fields in 2002 season, the average netwoth per family would decrease by 9% over the projected period.

However, as already mentioned before, this conclusion should be mitigated by the fact that some big discrepancies remain within the population living in this area. Thus, a fairer conclusion would be to say that population from Group B is structurally very exposed to natural hazards, but some families are counter balancing these hazards with a vast livestock.

Group C

(Amounts in $)	March-May 2002	June-August 2002	Sept.-Nov. 2002	Dec 2002 - Feb 2003	Cumulative
Revenues					
Rainfed fields - Wheat	0	116	0	0	**116**
Remittances	16	16	16	16	**65**
Humanitarian aid (1)	44	14	0	0	**58**
Total revenues	**60**	**146**	**16**	**16**	**239**
Costs					
Food expenses (2)	98	98	98	98	392
Total costs	**98**	**98**	**98**	**98**	**392**
Net income	**-38**	**48**	**-82**	**-82**	**-153**
Capital					
Initial capital	127	89	137	56	127
Change	-38	48	-82	-82	-153
Final capital	**89**	**137**	**56**	**-26**	**-26**
Debt					
Debt in cash	183	183	183	183	183
Debt in wheat	65	65	65	65	65
Total debt	**248**	**248**	**248**	**248**	**248**
Net worth	**-159**	**-111**	**-192**	**-274**	**-274**

(1) Based on Solidarites' programmes.
(2) 0.636 kg of wheat x 6 persons x 0.3 $ x 90 days.

The table below summarizes all the sources of income and of costs identified in our survey, on a per family basis, for Group C population. In addition, it provides some data in relation to average value of properties and debt contracted by an average family of the zone.

From an income perspective, the survey shows that population from Group C draw 49% of their annual revenues from their rainfed lands, the rest being derived from remittances (27%) and humanitarian aid (24%). These numbers suggest that the population from Group C is highly exposed to natural hazards. In addition and based on our best harvest scenario, the population would generate a severely negative net income for the season 2002, suggesting that inhabitants are relying on humanitarian assistance. This situtation is primarily due to the low rate of planted fields (12% of available fields), which is due in turn to the lack of seeds.

Besides, from a capital perspective, population from Group C is hit both by the lowest amount of livestock capital and by the highest amount of debt in the district. Overall,

the consequence is a negative initial networth per family, which, cumulated with negative incomes, leads to a further impoverishment over the 2002 season (73% decrease of the networth). Should the drought carry on, it would lead to a distressed situation, where the average networth would come down to –390$ per family. Consequently, it would be likely that the population would suffer from starvation or displacements before winter 2002/2003.

Food aid recommendations in Charkent district – Year 2002

- **Scenario 1:** The drought does not carry on

The district needs **5 815 MT of wheat.**[1]

- **Scenario 2:** The drought carries on

The district needs **9 485 MT of wheat.**[1]

Food aid recommendations in rainfed zone- Charkent district- Year 2002

- **Scenario 1:** The drought does not carry on

The district needs 7 **336 MT of wheat.**[2]

- **Scenario 2:** The drought carries on

The district needs **9 580 MT of wheat.** [2]

[1] See Excel table-Calculation methodology-Charkent district-February 2002

[2] See Excel table-Calculation methodology-Rainfed zone-Charkent district-February 2002

Annex 1 : Calculation methodology - Charkent district - February 2002

		Hypothesis: the drought stopped		Hypothesis: the drought goes on	
	Formula	**Calculation**	**Unit**	**Calculation**	**Unit**
Annual food needs	Methodology : 0,636 kg of wheat x 30 days x 12 months 229 kg x total Charkent population feb 2002	229 x 42 096 **9,640**	**MT of wheat**	229 x 42 096 **9,640**	**MT of wheat**
Annual income : **wheat production + livestock income + coping mechanism**	Irrigated fields wheat production 2002 : Number of jeribs cultivated x average seed rate in sers x average yield x 7 kg	903x 6,1x 4x7 154	MT of wheat	903x 6,1x 4x7 154	MT of wheat
	Potatoe production 2002 : Number of jeribs cultivated x average yield x equivalent value in wheat x7 kg	2 236x 8x (2,3/2)x 7 141	MT of wheat	2 236x 8x (2,3/2)x 7 141	MT of wheat
	Orchards production 2002 : Number of jeribs cultivated x average yield x equivalent value in wheat x7 kg	241x 338x (5/2)x 7 1,425	MT of wheat	241x 338x (5/2)x 7 1,425	MT of wheat
	Rainfed fields wheat production 2002 : Number of jeribs cultivated *x average seed rate in sers x average yield x wheat value	20 383 x9,5 x2,7 x7 3,670	MT of wheat	20 383 x2,7 x0 x7 0	MT of wheat
	Livestock income 2002 : (nb sheeps x average price sheep USD) + (nb goats x average price goat USD) + (nb cows x average price cows USD) + (nb oxen x average price ox USD) +	(11 385 x 100) + (9 834 x 40) + (274 x 333) + (708x 500) 2,020,500 7,068	USD MT of wheat	(11 385 x 100) + (9 834 x 40) + (274 x 333) + (708x 500) 2,020,500 7,068	USD MT of wheat
	Coping mechanism : 5% x nb of families concerned x average amount of money received from abroad (USD)	5% x 7 016 x 150 52,620 184	USD MT of wheat	5% x 7 016 x 150 52,620 184	USD MT of wheat
	Nb of casual workers in Afghanistan x average amont of money sent to their family	3 900 x 50 195,000 682	USD MT of wheat	3 900 x 50 195,000 682	USD MT of wheat
	5% x nb of families concerned x average annual other source of income (USD)	5% x 7 016 x 600 210,480 739	USD MT of wheat	5% x 7 016 x 600 210,480 739	USD MT of wheat
	ANNUAL INCOME (without livestock) : **ANNUAL INCOME :**	**6,995** 14,063	**MT of wheat** MT of wheat	**3,325** 10,393	**MT of wheat** MT of wheat
Humanitarian assistance	Solidarités	1,930	MT of wheat	1,930	MT of wheat
	TOTAL	**1,930**	**MT of wheat**	**1,930**	**MT of wheat**
Total food needs (excluding debt & livestock) Charkent district, Year 2002	Annual food needs - Annual income - Humanitarian assistance	9,640 6,995 1,930	MT of wheat MT of wheat MT of wheat	9,640 3,325 1,930	MT of wheat MT of wheat MT of wheat
	TOTAL FOOD NEEDS (excluding debt & livestock)	**715**	**MT of wheat**	**4,385**	**MT of wheat**
Total debt **(cash + wheat)**	Debt in cash = average debt (USD / family) x nb of families concerned	1,041,126 3,653	USD MT of wheat	1,041,126 3,653	USD MT of wheat
	Debt in wheat = average debt (kg / family) x nb of families concerned	1,446	MT of wheat	1,446	MT of wheat
	TOTAL DEBT (endebtment in cash & wheat)	**5,099**	**MT of wheat**	**5,099**	**MT of wheat**
TOTAL FOOD NEEDS (including debt) Charkent district Year 2002	ANNUAL FOOD NEEDS - ANNUAL INCOME - HUMANITARIAN ASSISTANCE = TOTAL FOOD NEEDS + TOTAL DEBT	9,640 6,995 1,930 715 5,099	MT of wheat	9,640 3,325 1,930 4,385 5,099	MT of wheat
	= TOTAL FOOD NEEDS (including debt and excluding livestock)	**5,815**	**MT of wheat**	**9,485**	**MT of wheat**

FOOD SECURITY ASSESSMENT

	I GENERAL INFORMATION	ANSWER	
1	Date :		
2	Name of Solidarites' Surveyor :		
3	Province where the survey is done :		
4	District :		
5	Agro-economic zone :		
6	Village :		
7	Community Forum :		
8	Fighting historic :		

	II POPULATION	TRANSLATION INTO FARSI	ANSWER	COMMENTS
9	What is the current number of families in the village ?	فعلا تعداد فامیل ها در قریه چند است؟		
10	What is the average family size in the village ?	تعداد اوسط اعضاء یك فامیل در قریه چند است؟		
11	Did the village benefit from humanitarian support in 2001 ?	آیا قریه در 2001 از کمکها مستفید گردیده است؟		
12	What is the number of families whose the head is a man (more than 16 years old) ?	تعداد فامیلهائیکه سرپرست شان مرد بیش از 16 ساله باشد چند است؟		
13	What is the number of families whose the head is a woman (more than 16 years old) ?	تعداد فامیلهائیکه سرپرست شان زن بیش از 16 ساله باشد چند است؟		
14	What is the number of families whose the head is a disabled person (more than 16 years old) ?	تعداد فامیلهائیکه سرپرست شان شخص معیوب بیش از 16 ساله باشد چند است؟		
15	What is the number of orphans ?	تعداد یتیمان چند است؟		
16	What is the number of widows ?	تعداد بیوه ها چنداست؟		
17	What is the ethnical structure of the village (% by ethny) ?	ساختمان قومی (فیصدی)قریه از چه قرار ست؟		
18	What is the number of families returned to their village since 3 months ?	تعداد چند فامیل از سه ماه به این طرف به قریه عودت نموده است؟		
19	What is the number of Internal Displaced families ?	تعداد فامیل های بیجاه شدهگان داخلی چند است؟		
20	What is the original location of these IDPs ?	محل اصلی این بیجاه شده گان کجاست؟		
21	What are the living conditions of these IDPs ?	شرایط زندگی بیجاه شده گان از چه قرار است؟		
22	How many families left the village since the last 3 months ?	چند فامیل از سه ماه به این طرف قریه را ترک گفته اند؟		
23	If yes, what are the reasons ?	هر گاه بلی،دلایل ترک گفتن چه است؟		
24	What is the number of houses totally destroyed ?	تعدادخانه های کاملا تخریب شده چند است؟		
25	What is the number of houses partially destroyed ?	تعداد خانه هائیکه قسما تخریب شده چند است؟		
26	What is a big landowner in the village ?	زمین دار بزرك در قریه کیست؟		
27	How many jeribs of irrigated lands does he have (jeribs) ?	این زمین دار چند جریب زمین آبی دارند؟		
28	How many jeribs of rain-fed land does he have (jeribs) ?	این زمین دار چند جریب زمین للمی دارد؟		
29	What is the number of big landowner in the village ?	تعداد زمین دار بزرك قریه چند است؟		
30	To which ethnic group do they belong ?	به کدام قوم تعلق دارند؟		
31	What is a small landowner in the village ?	کوچکترین زمین دار قریه کیست؟		
32	How many jeribs of irrigated land does he have ?	چند جریب زمین آبی دارد؟		
33	How many jeribs of rain-fed land does he have ?	زمین دار مذکور چند جریب زمین للمی دارد؟		
34	What is the number of small landowners in the village ?	به چه تعداد زمین دار کوچك در قریه وجوددارد؟		
35	What is the number of landless people in the village ?	تعداد اشخاص بی زمین در قریه چند است؟		

	III VILLAGE AGRICULTURAL PRODUCTION	TRANSLATION INTO FARSI	ANSWER	COMMENTS
36	What is the total rain-fed jeribs in the village ?	تعداد زمین للمی در قریه جند است؟		
37	What was the total jeribs cultivated under rain-fed wheat during 2001 ?	جند جریب زمین کندم للمی در سال 2001 زرع کردیده بود؟		
38	What is (or will be) the total jeribs cultivated under rain-fed wheat in 2002 ?	جند جریب زمین کندم للمی زرع کردیده ویا در سال 2002 زرع خواهد شد؟		
39	What was the average rain-fed wheat yield in 2001 (grain/seed) ?	اوسط حاصل کندم للمی در سال 2001 جند بود؟		
40	What is the average rain-fed wheat yield you expect for 2002 (grain/seed) ?	اوسط حاصل کندم للمی در سال 2002 جه قدر بیش بینی شده است؟		
41	What is the seed rate per jerib for rain-fed wheat (seer/jerib) ?	اندازه تخم کندم در یك جریب زمین للمی جقدر است؟		
42	What was the quantity of seeds for rain-fed wheat the village produced in 2001 ?	مقدار کندم للمی ایکه در سال 2001 در قریه تولید شده جند است؟		
43	What was the quantity of seeds for rain-fed wheat bought between Sept. 2001 and March 2002 (MT) ?	مقدار تخم کند م للمی ایکه بین سبتمبر 2001 و مارج 2002 خریداری شده است به تن جند است؟		
44	What is the quantity of fertilizers for rain-fed wheat you used for 2002 planting season (MT) ?	مقدار کود کیمیاوی ایکه در کند م للمی در موسم کشت 2002 استعمال شده است به تن جند است؟		
45	What quantity of fertilizers for rain-fed wheat did you buy for 2002 planting season (MT) ?	جه مقدار کود کیمیاوی در کندم للمی در فصل کشت 2002 به تن خریداری کرده اید؟		
46	What is the total irrigated jeribs in the village ?	جند جریب زمین ابی در قریه وجود دارد؟		
47	What was the total jeribs cultivated under irrigated wheat during 2001 ?	جند جریب زمین کندم ابی در سال 2001 زرع کردیده است؟		
48	What is (or will be) the total jeribs cultivated under irrigated wheat in 2002 ?	مقدار جند جریب زمین کندم ابی فصل سال 2002 زرع کردیده ویا زرع خواهد شده ؟		
49	What was the average irrigated wheat yield in 2001 (grain/seed) ?	اوسط حاصل کندم ابی در سال 2001 جند بود؟		
50	What is the average irrigated wheat yield you expect for 2002 (grain/seed) ?	اوسط حاصل کندم للمی فصل 2002 جقدر بیش بینی میشود؟		
51	What is the seed rate per jerib for irrigated wheat (seer/jerib) ?	مقدار استعمال کندم ابی در فی جریب جند است؟		
52	What was the quantity of seeds for irrigated wheat the village produced in 2001 ?	حاصل تخم کندم ابی ایکه در سال 2001 در قریه بدست امده جه مقدار است؟		
53	What was the quantity of seeds for irrigated wheat bought between Sept. 2001 and March 2002 (MT) ?	جه مقدار تخم کندم ابی بین سبتمبر 2001 و مارج 2002به تن خریداری کردیده است؟		
54	What is the quantity of fertilizers for irrigated wheat you used for 2002 planting season (MT) ?	جه مقدار کود کیمیاوی را در فصل 2002 به تن استعمال کرده اید؟		
55	What quantity of fertilizers for irrigated wheat did you buy for 2002 planting season (MT) ?	جه مقدار کود کیمیاوی را برای کندم ابی فصل 2002 به تن خریداری کرده اید؟		
56	Is there any second crop (yes or no) ?	ایا در کشت و کار فصل دوم وجود دارد یا نه؟		
57	If yes, what is the dominant one ?	هر کاه بلی، عمده ان کدام است؟		
58	What was the total jeribs cultivated under this second crop in 2001 ?	جند جریب در فصل دوم 2001 زرع کردیده بود؟		
59	What is the total jeribs cultivated under this second crop in 2002 ?	جند جریب زمین فصل دوم در 2002 زرع خواهد شد؟		
60	What was the average yield for this second crop in 2001 (seer/jerib) ?	اوسط حاصل فصل دوم در 2001 سیر فی جریب جند بود؟		
61	What is the average yield you expect for this second crop in 2002 (seer/jerib) ?	اوسط حاصل فصل دوم سیر فی جریب در سال 2002 جه قدر بیش بینی میشود؟		
62	Does the village have significant number of orchards (yes or no) ?	ایا در قریه تعداد قابل ملاحظه باغ وجود دارد یا نه؟		
63	If yes, what is the dominant fruit tree ?	هرکاه بلی، درخت میوه عمده جه است؟		
64	What has been the 2001 average fruit production (fresh or dried) per jerib (seer/jerib) ?	اوسط حاصل تولید میوه خشك یا تازه سیر فی جریب در سال 2001 جند بود؟		
65	How many families are having orchards in the village ?	جه تعداد فامیل در قریه باغ دارند؟		
66	What is the average number of jeribs under orchard per family in the village ?	اوسط جریب زمین های باغی در قریه در هر فامیل جه قدر است؟		

	III LIVESTOCK	TRANSLATION INTO FARSI	ANSWER	COMMENTS
67	How many sheep does the village has, including those that are currently in pasture ?	در حال حاضر چه تعداد گوسفند بشمول گوسفندان یکه در چراگاها است در سال های 2001 و 2002 در قریه میباشند؟		
68	How many goats does the village has, including those that are currently in pasture ?	در حال حاضر چه تعداد بز بشمول بز ها یکه در چراگاها است در سال 2001 /2002 در قریه وجود دارد؟		
69	How many cows does the village has, including those that are currently in pasture ?	در حال حاضر چه تعداد ماده گاو ها بشمول آنهایکه در چراگاه در سال 2002/2001 در قریه وجود دارد؟		
70	How many oxen does the village have ?	چه تعداد گاو های نر در قریه موجود است؟		
71	How many donkeys does the village have ?	چه تعداد مرکب در قریه موجود است؟		
72	How many camels does the village has, including those that are currently in pasture ?	چه تعداد اشتر بشمول آنهایکه در چراگاه اند در قریه موجود است؟		
73	Are there any heards died in 2001 ?	آیا در سال 2001 گله تلف شده است؟		
74	If yes, how many died and what are the reasons ?	هرگاه بلی، به چه تعداد تلف شده و دلایل آن چیست؟		
75	What was the total jeribs of fodder cultivated in 2001 ?	چند جریب زمین خوراکه حیوانی کشت شده است؟		
76	What is the total jeribs of fodder cultivated in 2002 ?	چند جریب زمین در فصل 2002 کشت شده است؟		
77	What was the average yield of fodder crop in 2001 (seer/jerib) ?	اوسط حاصل نبات خوراکه حیوانی در سال 2001 به سیر فی جریب چقدر بود؟		
78	What is the average yield of fodder crop you expect in 2002 (seer/jerib) ?	اوسط حاصل نبات خوراکه حیوانی در فصل 2002 به سیر فی جریب پیش بینی شده است؟		

	IV DRINKING WATER AND IRRIGATION	TRANSLATION INTO FARSI	ANSWER	COMMENTS
79	What is the number of wells in the village ?	تعداد چاه های قریه چند است؟		
80	In 2001, did you have to dig new wells ?	آیا در سال 2001 مجبور شدید که چاه حفر کنید؟		
81	In 2001, did you have to dig deeper wells (meters) ?	آیا در سال 2001 به حفر چاه عمیق (به متر) مجبور شده اید؟		
82	What was the thickness of the snow layer during winter 2000/2001 (centimeters) ?	ضخامت طبقه برف در 2000/2001 به سانتی متر چند بود؟		
83	What is the thickness of the snow layer this year (centimeters) ?	ضخامت طبقه برف در سال جاری چند است؟		
84	Was there any decrease of water in Karez between 2000 and 2001 ?	آیا در سال های 2000 و 2001 آب کاریز تقلیل یافته است؟		
85	If yes, what is the percentage of decrease ?	هرگاه بلی، فیصد ی تقلیل چقدر است؟		
86	Is there any decrease of water in Karez between 2001 and 2002 ?	آیا در سال های 2001 و 2002 در آب کاریز تنقیص وجوددارد ؟		
87	If yes, what is the percentage of decrease ?	هرگاه بلی ، فیصد ی تنقیص چه قرار است؟		
88	What is the current number of active springs ?	تعداد چشمه فعال فعلی چند است؟		
89	Was there any decrease of the number of active spring between 2000 and 2001 ?	آیا در سال 2000 و 2001 در تعداد چشمه های فعال تنقیص وجود داشت؟		
90	If yes, what is the percentage of decrease ?	هرگه بلی ، مقدار فیصدی چند است؟		
91	Is there any decrease of the number of active springs between 2001 and 2002 ?	آیا در سال 2001 و 2002 در تعداد چشمه های فعال تنقیص وجود دارد؟		
92	If yes, what is the percentage of decrease ?	هرگاه بلی، مقدار فیصدی تنقیص چند است؟		
93	Was there any decrease of the level of river beween 2000 and 2001 ?	آیا سطح آب دریا در سال های 2000 و 2001 تنزیل نموده است؟		
94	If yes, what is the percentage of decrease ?	هرگاه بلی ، فیصدی تنزیل چند است؟		
95	Is there any decrease of the level of river beween 2001 and 2002 ?	آیا سطح دریا در سال های 2001 و 2002 تنزیل نموده است؟		
96	If yes, what is the percentage of decrease ?	هرگاه بلی، فیصدی تنزیل چقدر است؟		
97	What is the distance between the village and the main source of water (minutes) ?	فاصله بین قریه و منبع اصلی آب چند دقیقه است؟		

	V ADDITIONAL INFORMATION & COPING MECHANISM	TRANSLATION INTO FARSI	ANSWER	COMMENTS
98	What is the average quantity of wheat stocked by families (kilos) ?	اوسط ذخیره گندم یک فامیل چند کیلو گرام است؟		
	What is the number of families who have in stock :	تعداد فامیل های که ذخیره دارند:		
99	0-10 kilos of wheat	0الی 10 کسیو گرام گندم		
100	10-20 kilos of wheat	10الی 20 کیلو گرام گندم		
101	20-30 kilos of wheat	20 الی 30 کیلو گرام گندم		
102	30-50 kilos of wheat	30 الی 50 کیلو گرام گندم		
103	50-100 kilos of wheat	50 الی 100 کیلو گرام گندم		
104	> 100 kilos of wheat	بیش از 100 کیلو گرام گندم		
105	What is the average debt in cash contracted by families in cash (KAF) ?	اوسط قرضه نقده فامیل ها چند است ؟ارقام به 1000 افغانی		
106	How many families are concerned by indebtment in cash ?	چند فامیل طور نقده مقروض اند؟		
107	What is the average debt in wheat contracted by families in wheat (kilos) ?	فامیل ها طور اوسط چند کیلو گرام گندم مقروض اند ؟		
108	How many families are concerned by indebtment in wheat ?	چه تعداد فامیل ها گندم مقروض اند؟		
109	What is the average volume of mortgage in cash (KAF) ?	اندازه حجم رهن (گروی) چند است ارقام به 1000 افغانی		
110	How many families are concerned by mortgage in cash ?	چه تعداد فامیل زمین خویش را به رهن (گرو) مانده اند ؟		
111	What is the average number of jeribs in mortgage (jeribs) ?	طور اوسط چند جریب به رهن گذاشته شده است؟		
112	How many families are concerned by mortgage in jeribs ?	چند فامیل زمین شانرا به رهن گذاشته اند؟		
113	How many families are receiving charity ?	به چه تعداد فامیل خیرات میگیرند؟		
114	What is the number of casual labourers in the village who work in Afghanistan ?	تعداد کارگران اتفاقی قریه، که در افغانستان کار میکنند چند است؟		
115	What is the number of shopkeepers in the village ?	تعداد دوکانداران قریه چند است؟		
116	How many families have close relatives abroad ?	اقارب نزدیک چند فامیل در خارج میباشند؟		
117	How many in Iran ?	به چه تعداد در ایران؟		
118	How many in Pakistan ?	به چه تعداد در پاکستان؟		
119	How many in Russia ?	به چه تعداد در روسیه؟		
120	How many in western countries and others ?	به چه تعداد در ممالک غربی وسایر ممالک؟		
121	In 2001, how many families have received money from abroad ?	به چه تعداد فامیل در سال 2001 از خارج پول دریافت نموده اند؟		
122	What is the average amount of money each family is receiving every year (KAF) ?	طور اوسط یک فامیل چه مقدار پول را از خارج دریافت میدارند؟ ارقام به 1000 افغانی		
123	Is there any other significant source of income in the village (yes or no) ?	آیا در قریه کدام منبع مهم عاید دیگر وجود دارد یا نه ؟		
124	If yes, what is it ?	هرگاه بلی، چیست؟		
125	How many families are significantly involved in this activity ?	به چه تعداد فامیل در این فعالیت مشغول اند؟		
126	What is the average income generated by this activity per year per family (KAF) ?	طور اوسط یک فامیل چه مقدار عاید را از این فعالیت بدست میاورد؟ ارقام به 1000 افغانی		
	What is the percentage of each type of cereal in the village diet ?	فیصدی هر نوع غله در خوراکه روزانه قریه چند است ؟		
127	Wheat (%)	فیصدی گندم		
128	Corn (%)	فیصدی جواری		
129	Rice (%)	فیصدی برنج		
130	Barley (%)	فیصدی جو		
131	Other (%)	فیصدی سایرین		

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I. METHODOLOGY

Objectives

The aim of the present survey is to quantify the current levels of food security in the different areas of the district of Charkent and to provide related background information.

Team responsible

Two Afghan specialists have been involved in this assessment:

- A senior hydro-geologist engineer
- A senior agronomist engineer

In addition, an expatriate hydraulic engineer has been in charge of managing the team, collecting and analysing data.
The Afghan team has been trained for this assessment by the expatriate engineer, who also accompanied them during their first surveys.

Methodology

Before starting the assessment, the district has been divided into agro-ecological zones, reflecting the different types of agriculture and livestock production.
Based on the number of villages in each zone, one or several villages have been surveyed. These villages are reflecting the average of the zone in terms of agriculture, wealth, accessibility and size.
All of the selected villages have been surveyed with a questionnaire resulting from a mix between Solidarites and VAM tools. Most of the assessments have been double-checked with a visit of the village by the engineer or by asking information from a representative of a neighbouring village.
15% of the villages listed on the UN cards have been surveyed. They account for 30% of the district population.
The prices of the main food commodities used in the district have been asked from the district market.

Period of interviews

From mid-February to mid-March 2002.

Questionnaire outline

The questionnaire was structured around five areas of investigation:

- Population
- Village agricultural production
- Livestock
- Drinking water and irrigation
- Additional information and coping mechanism

II. ANALYSIS OF CHARKENT DISTRICT

The district of Charkent starts one hour by car south of Mazar-e-Sharif.

Most of the district is situated in montainous places, exept few villages which own irrigated lands by springs.

Ethnically speaking, most of the district is Hazara (about 70%), with Tadjik minorities North and South (25 %) and 5% of Uzbeks.

The district can be divided into three main economical-agricultural zones:

- An irrigated zone, with orchards as the main source of income. The people living in this specific area will be called **group-A** in this report.
- A mountainous zone benefiting from easy access to/from Mazar-e-Sharif. The people living in this specific area will be called **group-B** in this report.
- The rest of the district who lives in rainfed zones. This zone can in turn be divided into three areas:
  - The West side of the district is middle altitude rainfed zone.
  - The East side of the district is high altitude rainfed zone.
  - The South part of the district is low altitude rainfed zone.

  The people living in this specific area will be called **group-C** in this report.

Population data

General Census of Charkent District in February 2002

Zone	Number of villages	Number of families	Overall Population (1)
Shadian	5	645	3870
Safid Chichma	4	430	2580
Sub-total group A	**9**	**1075**	**6450**
Tarolai	3	439	2634
Sub-total group B	**3**	**439**	**2634**
Oy Bulak	16	3238	19428
Yailak	7	836	5016
Miranji	9	1428	8568
Sub-total group C	**32**	**5502**	**33012**
TOTAL DISTRICT	**44**	**7016**	**42096**

Source : SOLIDARITES data

1075 families are living in irrigated lands (group A), 439 in rainfed lands with easy access to Mazar (group B) and 5,502 families in rainfed lands (group C). Therefore, the main part of the population lives in rainfed areas far from the city.

Additional data:

- 78% of heads of family are men, 22% are women.
- 10% of heads of family are disabled persons.
- 18% of the population is made up of orphans, 7% of widows.

Almost nobody returned or left the district in the last three months. Overall, the population is fairly stable.

Agricultural production by type of dominant culture system

Rainfed fields

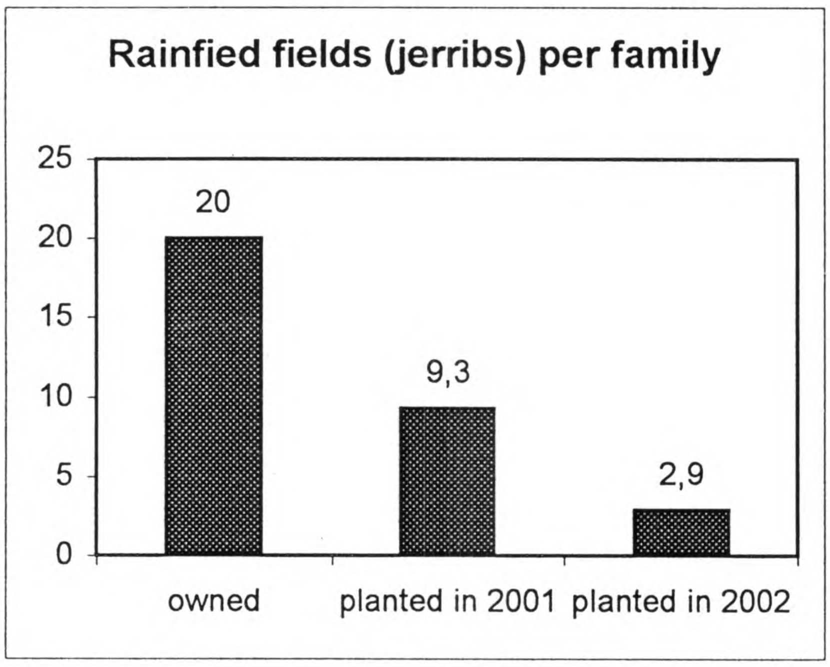
The table below summarises the wheat production in rainfed lands, broken down by zone :

	Wheat rainfed production						
Zone	Total surface (jbs)	Cultivated surface in 2001 (jbs)	Cultivated surface in 2002 (jbs)	2001 yield (grain/seed)	Expected 2002 yield (grain/seed)	Seed rate (sere/jb)	Expected 2002 production (seer)
Shadian	6450	2150	1075	0,2	10	2	21500
Safid Chichma	21500	10750	4300	0,3	10	2	86000
Sub-total group A	**27950**	**12900**	**5375**	**0,3**	**10**	**2**	**107500**
Tarolai	12540	7526	3136	0,3	10	3	94000
Sub-total group B	**12540**	**7526**	**3136**	**0,3**	**10**	**3**	**94000**
Oy Bulak	69784	38614	9491	0	9	3	256250
Yailak	2866	717	358	0	8	2	5728
Miranji	29750	5950	2023	0	10	3	60700
Sub-total group C	**102400**	**45281**	**11872**	**0**	**9**	**3**	**322678**
TOTAL DISTRICT	**142890**	**65707**	**20383**	**0**	**9,5**	**2,7**	**524178**

Source : SOLIDARITES data

The rainfed lands almost did not produce anything in 2001, regarless of the altitude or the soil.

The chart below shows the evolution of planted rainfed fields per family over the past two years:



Source : SOLIDARITES data

This chart shows the strong decrease of planted rainfed fields from 2001 to 2002, as well as the poor proportion of planted fields (14% in 2002).

Due to the past three years drought, the rainfed fields did not produce at all in 2001. Consequently the farmers could not stock any seeds for this year, nor could they buy enough seeds for the whole surface they own.

For the season 2002, two scenarios can be anticipated:

- **Scenario 1: the weather becomes favourable to rainfed agriculture**: the farmers who planted expect a production of 74 seers per family. In this scenario, the income generated from rainfed can be calculated as follows:

INCOME FROM RAINFED LANDS			
Group	Total production of wheat (seer)	Production per family (seer)	Equivalent in $ (1 seer= 2 $)
Group-A	**107500 seer**	107500 seer/ 1075 families = **100 seer/family**	100 seer/family x 2$/seer = **200 $/family**
Group-B	**94000 seer**	94000 seer/ 439 families = **214 seer/family**	214 seer/family x 2$/seer = **428 $/family**
Group-C	**322678 seer**	322678 seer/ 5502 families = **58 seer/family**	58 seer/family x 2$/seer = **116 $/family**
Total district	**524178 seer**	524178 seer / 7016 families =**74 seer/family**	74seer/family x 2$/seer = **149 $/family**

Source : SOLIDARITES data

- **Scenario 2: The drought is going on this year**: the production will be close to zero as well as the number of rainfed field planted in the next season, due to further impoverishment of landowners.

Irrigated fields

Irrigated fields account for 0,7% of the 143800 jbs cultivated lands in the district. These fields are generally sown twice a year, one time with winter wheat and one time with potatoes (in summer, after winter wheat harvesting).

- Wheat production: